

CONSIDERED: /P.T.R./

033082M342

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Shigeo ASHIGAKI, et al.

U.S. Serial No.: 10/591,345

Group Art Unit: To Be Assigned

Filed: : August 31, 2006

Examiner: To Be Assigned

For: PEELING-OFF METHOD AND REWORKING METHOD OF RESIST FILM

**SECOND INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. 1.56, Applicants are enclosing an Information Disclosure Citation Form (PTO-1449) and copies of the documents cited.

Applicants' comment on the documents listed on the enclosed Form PTO-1449 as follows. Documents AA and AQ have proposed to use a Si-C film of a multi-layer structure having an antireflective function and a hard-mask function, as explained in Applicants' specification. Documents AH and AI have disclosed that sulfuric acid and hydrogen peroxide aqueous solution are used in general in a peeling-off step of the photo-resist film in a reworking process, also as explained in Applicants' specification.

Document AJ has disclosed that a thinner is used as a rinse liquid to be supplied for removing a resist film on a wafer edge. Document AK has disclosed that a resist film in an edge section of a substrate is removed by an edge rinse wherein a resist film remover such as a thinner is used immediately after spreading of the resist film. Lastly, document AL has disclosed that a thinner removes a several mm resist film from the periphery section.

It is respectfully requested that the cited documents be considered by the Examiner in the above-identified patent application and that the cited documents be made officially of record therein. It is further requested that a listing of the same appear on the face of any patent which may issue from this application.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.T.R.



This Information Disclosure Statement is being filed in advance of the receipt of a first Office Action in this application. Therefore, it is believed that no fees are due under 37 C.F.R. Section 1.97(b)(3).

Respectfully submitted,  
SMITH, GAMBRELL & RUSSELL, LLP

By:



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September 29, 2006

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.T.R



FORM PTO-1449  
INFORMATION ENCLOSURE STATEMENT

ATTY. DOCKET  
033082M342

SERIAL NO.  
10/591,345

APPLICANT:  
Shigeo ASHIGAKI, et al.

FILING DATE  
August 31, 2006

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1795

#### U.S. PATENT DOCUMENTS

*Examiner's Initials		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE, IF APPROPRIATE
/P.T.R./	AA	6,316,167	11/13/01	Angelopoulos et al.	430	313	1/10/2000
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						

#### FOREIGN PATENT DOCUMENTS

*Examiner's Initials		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
/P.T.R./	AH	05-021334	1/29/93	Japan			X
/P.T.R./	AI	06-291091	1/18/94	Japan			X
/P.T.R./	AJ	11-016804	1/22/99	Japan			X
/P.T.R./	AK	2000-147790	5/26/00	Japan			X
/P.T.R./	AL	2000-156339	6/6/00	Japan			X
	AM						
	AN						
	AO						
	AP						

#### OTHER INFORMATION (Including Author, Title, Date, Pertinent Pages, Etc.)

AQ	K. Babich, et al., "Novel ARC/Hardmask Technology for 65 nm CMOS Device Patterning", IEDM Tech. Dig., 3 pages (2003)
AR	
AS	

#### EXAMINER:

/Ponder Thompson Rummel/

#### DATE CONSIDERED:

09/29/2008

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.T.R.